

Using Identity and Age Verification within Social Networking Sites

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ABSTRACT

Identity verification (IdV) is used hundreds of thousands time a day by businesses to conduct commerce, reduce risk and stop fraud on the Internet. Age verification is considered a derivative of identity verification because you have to know who someone is before you can age verify them. There are different levels of IdV that can be used depending on the level of risk. A higher level of verification is knowledge-based authentication (KBA) which determines someone is who they claim to be through a dynamically generated multiple-choice quiz based on a person's personal history.

Keywords

Identity verification, age verification, authentication technologies, knowledge-based authentication, trusted identities

Functional Goals

Please indicate the functional goals of the submitted technology by checking the relevant box(es):

- Limit harmful contact between adults and minors
- Limit harmful contact between minors
- Limit/prevent minors from accessing inappropriate content on the Internet
- Limit/prevent minors from creating inappropriate content on the Internet
- Limit the availability of illegal content on the Internet
- Prevent minors from accessing particular sites without parental consent
- Prevent harassment, unwanted solicitation, and bullying of minors on the Internet
- Other – provides SNS with the ability to verify and enforce the Terms of Service requiring consumers to provide “accurate and complete” information about themselves. Users can still maintain anonymity under pseudonyms and screen names.

PROBLEM INTRODUCTION

By performing age verification on its members, Social Networking Sites (SNS) will be able to identify adult members which serves to prevent harmful contact between adults and minors because it separates the users and allows SNS to provide additional protection measures where needed. Additionally it prevents minors from accessing inappropriate content within the adult community.

Specifically age verification enables SNS to segment content access (verified Walled Garden) and provide additional controls for parents (Parental Consent) to

prevent or enable access to particular sites for their minor children. Additionally, these technologies ensure SNS are dealing with legitimate identities versus fraud or id thieves (Cyber bullying)

PROPOSED SOLUTION

Age Verification and KBA

Age verification is a simple “under the covers” process that is used to determine if an identity is real. The first step is to capture information from the consumer such as name, residence zip code, year of birth (YOB). With these inputs, IDology's system accesses billions of public data records from thousands of sources. The verification result is returned instantly and is limited to the result such as “Verified – of age” “Underage” or “Confirm Age.” This results-only approach serves to protect consumer privacy. IDology has numerous enterprises that successfully use age verification commercially today including SNS and mobile adult messaging.

A higher level of verification that can be used in conjunction with age verification is KBA. KBA uses intelligent, multiple-choice questions that are dynamically generated based on the information found within a consumer's data record. An important distinction of KBA technology is it is not shared authentication which asks a question that a consumer previously provided the answer such as mother's maiden name or where you went to college. KBA questions are based on a person's history and include topics such as historical addresses, people you know, cars you have owned and more. IDology's questions are non-intrusive and not based on credit history. KBA is very effective for account origination because the questions are not easily answered by anyone other than the person being verified and they are generated on the fly based on information found on the consumer. Additionally, IDology's solution incorporates various features to control fraud and repeated attempts for verification. IDology has numerous enterprises that successfully utilize KBA for online account creation and many other uses where knowing someone is who they claim to be is important.

Using Age Verification within a Walled Garden

By using identity and age verification technologies, SNS are able to easily and effectively create a “walled garden” for “verified” members that are age 18 and over and a separate community for “unverified” members. Typically consumers unable to be verified are either not real people or under the age of 18. Once a consumer becomes a

“verified” member they are granted access to a community with fewer restrictions on content and member interaction.

Based on our understanding of the agreement with the Attorney Generals, MySpace agreed to establish walled gardens. For example, MySpace users over 18 cannot browse for users under 18 and users under 18 cannot browse for swingers. From what we have observed in the registration process, MySpace appears to rely on the honesty policy for segmenting users. By incorporating IdV and age verification MySpace will be able to create a verified community and confirm the information consumers present is “accurate and factual” as outlined in MySpace’s Terms of Services.

IMVU is an online virtual world experience with 20 million registered members and serves as an example of a successful implementation of a “Walled Garden” utilizing IDology’s solutions. IMVU segments its content by teen, general adult and Access Pass. Access Pass is an add-on feature with additional content and functionality for adults. Age verification within IMVU is required to gain an Access Pass and interestingly was requested by the users of IMVU. Once a member has been age verified, they are provided with a token which is displayed with the member’s avatar.

Using Age Verification with Parental Consent

ZoeyRoom.com, a social network for girls ages 9-14, provides a use case for parental consent. The site follows Child Online Privacy Protection Act (COPPA) guidelines and also uses KBA to verify parents and adult group leaders before allowing the adult to set up an account for a child. Further verification is performed by approval of a credit card. A child is not granted access until their responsible adult is verified and grants consent. Once a girl joins ZoeyRoom, other technologies are layered in such as moderation to monitor cyber bullying and inappropriate behavior with enforced consequences for any violations.

Limiting Cyberbullying through Age Verification

Age verification enhances moderation technologies and other protection processes by limiting the pool of members to which such technologies are applied. By creating two separate communities, SNS are able to reduce the amount of resources and effort required to monitor the activities of its unverified community. Additionally, because KBA technology verifies someone is who they claim to be, the use of such technology eliminates the ability for users to set up fake profiles or by stealing someone else’s identity.

Age Verification with CardSpace and Other Technologies

As a thought leader in the IdV market, IDology has teamed with other technologies to further extend the establishment of a verified identity (a “Trusted Identity”). Through the use of CardSpace, IDology has enabled a framework that gives the consumer the ability to leverage a Trusted

Identity or a claim of a Trusted Identity such as being a minimum age (18+) across multiple SNS or other enterprises that require an “of age” claim. Please see a description of this in “More Information” below by Mike Jones of Microsoft. The establishment of a Trusted Identity through KBA can also leverage other technologies that further validate a person with a second factor such as the combination of IDology KBA with UPEK biometrics. See “More Information” below.

Features and Benefits

- Requires nominal data input to process verifications. IDology’s ExpectID suite of solutions can verify someone based on name and address only with optional inputs of YOB and SSN4. Based on a study of Nielson’s Top 10 SNS in May 2008, IDology could perform verifications using the input already being captured on the majority of these sites.
- Accesses billions of public record data sources to confirm an identity in a matter of seconds
- IdV happens “under the covers” and is seamless to the transaction
- KBA uses non-intrusive multiple choice questions that are dynamically generated
- Results are masked to protect consumer privacy and are limited to “Verified” or “Not Verified”
- Flexible, easy to use system with on-demand configuration controls for SNS to control the verification process from start to finish with extensive reporting
- Limits the amount of data shared between data providers and SNS to promote consumer privacy
- System allows for specific limitation settings to prevent fraud (velocity monitors, transaction limits, etc.)

Technical Attributes

Our solutions are offered as a hosted service and can be delivered through several different methods including:

- **API** – our API makes it very easy to seamlessly integrate within SNS. An HTTPS post yields real-time results which are passed back in an XML format.
- **Web Portal** – users are provided a user name and password to IDology’s IDCenter, an internet-based product that gives you the ability to perform verifications when needed.
- **Mobile** – perform identity and age verifications including KBA questions through a handheld device
- **Batch** – upload and run batch files through the IDCenter.

Because IDology is a hosted service, there are no hardware or software installation requirements other than having access to the Internet. IDology’s API is extremely simple by design and can be implemented in just a few days.

IDology's technology's effectiveness can be measured via its successful commercial deployments in multiple age verification markets (See "Expertise" below). There are no standard bodies and IDology's solutions are U.S. based today. IDology's technology is designed to work with multiple data providers so that use of our technology in foreign markets is possible provided adequate data sources are available.

Strengths/Weaknesses Analysis

There are several objections that have been voiced related to age verification that IDology addressed in its presentation to the Task Force on June 20, 2008. These objections and our responses are:

"It doesn't work" – IdV and age verification are already being used by multiple industries. The technology is considered commercially reasonable, scalable and is enabling e-commerce, stopping fraud and verifying identities and ages in the normal course of doing business today.

"It is invasive and violates privacy issues" – IDology's solution requires minimal information from the consumer (Name, YOB, Zip) which is information already being captured by most SNS. Results of verifications are limited to the validation of the claim. Additionally, IDology's solution accesses data in real-time and essentially serves as a firewall between the SNS and the data providers so as to minimize data exposure on a consumer.

"Prevents anonymity" – a study of the terms of service of Nielson's May 2008 Top 10 SNS ranked by monthly visits, shows all these SNS require users to provide true and accurate information about themselves to join. Providing anonymity should be supported through profile settings and screen names.

"Kids can fool the system" – using a higher level of verification such as KBA prevents a consumer from joining using someone else's identity credentials which can also be combined with the IT security model of a layered approach. Additionally, unique identifiers can also be captured such as SSN4.

"It doesn't verify kids" – the limitations of any age verification solution are based on the availability of data. In the situation where minors are concerned this data is protected. However, age verification does identify adults and can be used to establish an adult 'walled garden' community with less restrictions related to content and activities.

Overall the strengths of IDology's IdV and age verification are:

- Commercially reasonable solution that quickly and easily verifies someone's identity and age
- Scalable and flexible solution that requires minimal input from the consumer and protects consumer privacy by limiting overexposure to data

EXPERTISE

IDology is a leading provider of identity and age verification solutions and provides its services to many well known companies in a variety of industries. Currently IDology is conducting age verification for customers in several age-related industries including wine, distilled spirits, tobacco, telecommunications, social networks, medical and other age-rated vendors and services. IDology's KBA technology also is being used in several industries with high fraud risks including financial services, retail, healthcare, insurance and more. Additionally IDology has established significant partnerships in the identity and age verification market and is a recognized thought leader on issues related to establishing trusted identities in consumer- not-present situations.

COMPANY OVERVIEW

Founded in 2003, IDology is a best of breed provider focused solely on delivering leading solutions in the age and identity verification market. IDology provides real-time technology solutions that verify an individual's age and identity for anyone conducting business in consumer-not-present environments such as the Internet or a call center.

IDology is lead by John Dancu who is a successful entrepreneur that has a history of successfully building rapidly growing innovative companies. Management and key investor bios are in "More Information"

One of the fundamental principals IDology was founded on is to keep material (products, services and content) intended for adults out of children's reach. This principal and our educational approach have contributed to IDology's leading position in the market. Our ExpectID Age product has been endorsed by both WineAmerica and Specialty Wine Retailers Association as the preferred solution for their members and tested and approved by the State of Michigan for all direct wine shipments in and out of the State.

BUSINESS MODEL OVERVIEW

IDology's solutions are delivered as Software as a Service and charged on a per transaction basis.

MORE INFORMATION

<http://www.idology.com> – IDology's corporate website

<http://blog.idology.com/2008/04/28/age-verification-research/> – an IDology blog post with research about age and identity verification in various industries and countries.

http://www.idology.com/assets/CS_zoeyroom.pdf – an in depth case study of ZoeyRoom.com, a social network for 9-14 year old girls using IDology’s age verification service combined with parental consent

<http://self-issued.info/?p=77> – Microsoft’s Mike Jones discussing a demonstration of making a verified age claim using IDology’s service and CardSpace technology

<http://www.idology.com/assets/expectIDage.pdf> – product sheet on IDology’s ExpectID Age solution

<http://www.idology.com/assets/knowledgesheet.pdf> – product sheet on IDology’s KBA solution

http://www.idology.com/transfers/upek_idology_idverifyso1_040308.pdf- overview of IDology’s KBA technology working with UPEK biometrics to provide an end-to-end online verification solution for consumers

http://www.idology.com/whitepapers/WP_AgeOnline.pdf – a whitepaper on age verification titled “Doing the Right Thing: How Electronic Age Verification Protects Kids Online”

<http://www.idology.com/leadership.html> – IDology’s management biographies

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CERTIFICATION

IDology certifies that it has read and agreed to the terms of the Internet Safety Technical Task Force Intellectual Property Policy.